

STATE OF MISSOURI  
DEPARTMENT OF NATURAL RESOURCESDIVISION OF ENVIRONMENTAL QUALITY  
P O Box 176 Jefferson City MO 65102 0176

September 23 1996

Mr Steven Kinser  
EPA, Region VII  
Superfund Division  
726 Minnesota Ave  
Kansas City, KS 66101RE Westlake Landfill Site  
Operable Unit 2

Dear Mr Kinser

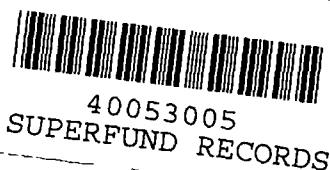
The Missouri Department of Natural Resources' Hazardous Waste Program, with support from the Division of Geology and Land Survey, has completed the review of the Physical Characterization Technical Memorandum for the subject site. The following comments are provided for your consideration.

- 1) Figure 3-2 It is assumed that none of the wells were actually constructed as shown in this figure. The use of cement/bentonite grout in the screened interval would be less than satisfactory. For a document reviewed by CER and WEH it seems it would have been noticed. Please supply individual well construction diagrams for each well in the proposed monitoring network.
- 2) Page 4-14, Deep Salem Formation It is concluded that groundwater flow in the deep Salem Formation is toward the active landfill. This was based on water level measurements in the four piezometers surrounding, and adjacent to the landfill, and the leachate collection sumps within the landfill. Although this may be true in the vicinity of the active landfill, no data has been collected to confirm this pattern of groundwater movement for the northern and western portions of the site. A groundwater divide, similar to the one observed in the unconsolidated material, may be present. This comment also applies for the St. Louis/Upper Salem Formations.
- 3) Page 4-28, section 4.3.1 It seems unlikely that local (on site) precipitation would have much effect on the stage of the Missouri River. Figure 4-34 indicates that on average at the beginning of the month of November precipitation and river stage are trending in opposite directions. In other words, local rainfall is increasing and river stage is decreasing.

7ES

|       |                   |
|-------|-------------------|
| Site  | Westlake Landfill |
| ID #  | MB0079900932      |
| Break | 1.6 042           |
| Other | 9-23-96           |

0714



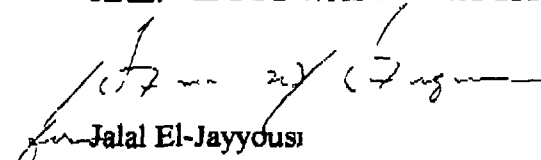
Mr Steven Kinser  
September 23, 1996  
Page Two

- 4) Page 4-29, section 4 3 2 An average of 99,000 gal/day of rain water discharge seems a bit high Please provide some data to support this statement
- 5) Page 6-3 Alluvial Monitoring Points Except for MW-103, it appears that no monitoring is proposed to the west of the observed groundwater divide This is significant since no hydraulic control has been established at this part of the site Consequently any contaminated groundwater west of the divide is expected to move off-site
- 6) Page 6-4, St Louis/Upper Salem Monitoring Points No monitoring points are proposed for the northern and western portions of the site This comment also applies for the Deep Salem Monitoring points
- 7) Page 6-7 Leachate Monitoring Locations It appears that LR 102 will not be monitored The rationale for excluding this leachate riser from the monitoring network is not provided Also please refer to comment No 5

If you have any questions regarding these comments or if I can be of any assistance to you please feel free to contact me at (573) 751-3176 Thank you for the opportunity to review this document

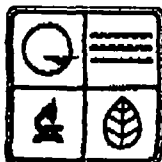
Sincerely,

HAZARDOUS WASTE PROGRAM

  
Jalal El-Jayyousi  
Environmental Engineer

JEJ rw

c Ward Hurst, Golder Associates Inc  
Michael Siemens, DGLS

MISSOURI DEPARTMENT OF NATURAL RESOURCES  
FAX Transmittal Cover SheetDate of Fax 9-23-96

- |                          |              |
|--------------------------|--------------|
| <input type="checkbox"/> | URGENT       |
| <input type="checkbox"/> | Priority     |
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| <input type="checkbox"/> | As Requested |
| <input type="checkbox"/> | FYI          |

To Steve Kynard 913-551-7063  
Ward Herot 314-936-1135From Salal El-Gayyousi

FAX \_\_\_\_\_ Phone \_\_\_\_\_

FAX \_\_\_\_\_ Phone \_\_\_\_\_

SUBJECT \_\_\_\_\_

COMMENTS Hard copy to follow

RESPONSE EXPECTED \_\_\_\_\_

Total # of pages sent (including transmittal sheet) 3If problems with FAX call Lynn 751-1807